

United States Government

Department of Energy  
Bonneville Power Administration

# memorandum

DATE: March 20, 2006

REPLY TO  
ATTN OF: KEC-4

SUBJECT: Supplement Analysis for the Watershed Management Program EIS (DOE/EIS-0265/SA-255)

TO: Linda Hermeston - KEWL-4  
Fish and Wildlife Project Manager

**Proposed Action:** Fulton Diversion Dam Fish Passage Project - Phase 1

**Project No:** 2005-007-00

**Watershed Management Techniques or Actions Addressed Under This Supplement Analysis**

**(See Appendix A of the Watershed Management Program EIS):** 1.8 Bank Protection Through Vegetation Management; 1.16 Spawning Habitat Enhancements; 2.1 Maintain Healthy Riparian Plant Communities; 2.7 Avoid Exotic Species; 2.9 Mechanical Vegetation Removal; 3.37 Spill Contingency Planning; 4.1 Irrigation Water Management; 4.10 Water Conveyance: Pipeline; 4.22 Avoid Excess Irrigation Flows; 7.2 Install Hydraulic Structures at Low Streamflows; 7.10 Erosion Control and Revegetation at Project Completion; 8.11 Equipment Servicing; 8.22 Site Protection; 8.23 Monitor Revegetated Areas; 9.22 Construction: Erosion and Sediment Control Plans; 9.23 Construction: Erosion and Sediment Control Structures; 9.24 Construction: Inspect Erosion and Sediment Control Structures

**Location:** The Fulton Diversion Dam is located at river mile 0.8 of the Chewuch River, tributary stream of the Methow River, Okanogan County, Washington.

**Proposed by:** Bonneville Power Administration (BPA) and US Bureau of Reclamation.

**Description of the Proposed Action:** The Fulton Diversion Dam Fish Passage Renovation project proposes to repair the deteriorating and non-functioning dam and concrete fish ladder in the Chewuch River. The existing diversion dam on the right side is approximately 7 feet high and consists of loose, 3 to 5-foot diameter angular boulders that continually wash off the top of the dam during high flows. Repairs require entry into the Chewuch River at least every other year and a complete failure is likely to occur. This project is being proposed in two phases. Phase 1 of this project would pipe a length of ditch between the headgate and the fish screen, and include work on adjacent Okanogan National Forest land to secure rock to be used for Phase 2 of this project and the Chewuch Dam project.

Fulton Phase 2 includes proposed improvement to repair the diversion dam, provide fish passage through a roughened channel and constructing a permanent wall or berm on river left bank to reduce flooding and restore private land used during construction. Phase 2 activities would be analyzed for environmental compliance in a separate SA because design issues still need to be worked out with NOAA Fisheries.

**Analysis:** The compliance checklist for Phase 1 of this project was completed by Chris Johnson, Chewuch Basin Council, and meets the standards and guidelines for the Watershed Management Program Environmental Impact Statement (EIS) and Record of Decision (ROD).

The existing diversion dam may be a barrier to upstream fish migration for some fish species such as summer Chinook and also for life stages such as fry or juveniles of other species. In addition, the angular rocks of the Fulton Dam have been documented to act as a fish strainer causing injuries and mortality to steelhead and Chinook smolts on out-migration.

The Fulton Ditch runs along the base of a steep bluff parallel to the river and 10 to 20 feet away from ordinary high-water line until it reaches the fish screen about 1,050 feet downstream. The ditch is about 12 feet wide and is about 18 to 24 inches deep at full capacity. A thin band of vegetation (grasses, small alders and cottonwoods, willows and other hardwood shrubs) exists between the ditch and the river.

At flood flows, this narrow area is subject to erosion, which can lead to a ditch blowout, which causes undue sedimentation that requires immediate repair. The ditch has two concrete waste structures with stoplog control. The first is about 100 feet downstream from the headgate, the other is immediately upstream from the fish screen. Adult fish spawn in the ditch; this is a problem in the fall after irrigation season when the ditch is dewatered and the redds dry up.

Phase 1 of this project would pipe a 775 foot length of ditch between the first concrete spillway to a point just up the canal from the existing fish screen. Piping would eliminate the existing upper ditch wasteway. The lower wasteway at the fish screen would operate with a reduced quantity of water. The enclosed pipe would have no spawning habitat or stopping points for fish, thereby preventing adult salmonids from spawning in the ditch. Piping would also allow for a reduced crest height on the diversion structure planned for phase 2.

A list of threatened or endangered species present includes Ute ladies' tresses, Bald eagle, and Northern spotted owl, Grizzly bear, Gray wolf, and Canada lynx. The Chewuch River provides spawning, rearing, and passage habitat for Upper Columbia spring Chinook salmon, Upper Columbia summer steelhead, and Bull trout. Critical Habitat has been proposed for bull trout but none is designated in the project area.

A Biological Assessment is being written for the Fulton Diversion Dam Fish Passage Renovation Project. Preliminary Section 7 consultation with Karl Halupka, USFWS, regarding Phase 1 of this project reveals a determination that Phase 1 of the project is expected to have no effect on listed fish, plant or wildlife species or any critical habitat. (PSmith Pers. Com. 7/22/05). Continued consultation with regard to the BA and Phase 2 of the project is on-going and would be addressed in the Phase 2 SA.

This project is designed to conform to the NMFS Biological Opinion for the BPA Habitat Improvement Program (NMFS ref 2003/00750). It incorporates the general conservation measures presented in the HIP BO for construction activities (Section 1.2.2 and 1.2.3, pages 27 to 41) as well as the specific conservation measures for improvement of irrigation diversion dams (Section 1.2.8.5, page 60). Therefore, no additional ESA consultation with NOAA Fisheries is needed.

Archeologist, Mark DeLeon, USBOR, surveyed the project site and provided a report dated September 23, 2005, identifying the area of potential effect (APE) and returning a finding wherein the proposed activities would have no effect on native religious or cultural sites, nor would it affect archaeological sites, or historic properties or areas. Subsequent to that report, a more in-depth literature search revealed that the Fulton Ditch may be eligible for listing in the National Register of Historic Places. BPA Archeologist, Steve Tromly, has further consulted with the State of Washington Department of Archaeology and Historic Preservation (DAHP), the Colville Tribe, and Yakama Tribe regarding the canals eligibility for historic properties. After extensive discussion and review of the canal, it was determined that the Fulton Canal APE has been significantly altered over the years compromising the integrity of the site and therefore, is not eligible for listing in the National Register of Historic Places.

On March 8, 2006, BPA received a letter of concurrence documenting the DAHP's findings, which is attached to this SA. Therefore, the proposed project activities would have no effect on cultural resources for this APE.

However, it was recommended by the DAHP that the remaining portion of the Fulton Ditch outside the present project APE be inventoried and assessed for National Register eligibility. BPA will fill out and submit an Historic Inventory Form for the remaining portion of the Fulton Ditch and submit the form to DAHP by August 2006.

A Phase I Environmental Site Assessment for the Fulton Diversion Dam Repair and Fish Passage Renovation was completed. A report dated October 14, 2005 was prepared by Frederick Walasavage, Environmental Protection Specialist, with findings that a Phase I did not reveal any environmental factors that would pose a significant liability for remedial action or cleanup under the Comprehensive Environmental Recovery, Compensation and Liability Act (CERCLA) and found no hazardous or toxic waste on the site.

All applicable permits would be required prior to any ground disturbing activities.

Fulton Phase 1 also includes work on adjacent Okanogan National Forest land to excavate and sort rock in an existing borrow pit. The rock would be used for the Chewuch Dam Replacement project and Fulton Phase 2. The US Forest Service has prepared a Categorical Exclusion (CE) Decision Memo for East Chewuch Borrow Pit authorizing work for extraction of rock. Attached to this SA is a copy of that CE along with a Contract for the Sale of Mineral Materials, Contract Number 4-5005. This authorization finds "no extraordinary circumstances were found to exist, as described below, that might cause work in the borrow pit to have a significant effect on the quality of the human environment as described under 40 CFR 1508.27." "Although threatened, endangered, or sensitive species may use the borrow pit, due to the limited time to accomplish work in the borrow pit and lack of vegetative disturbance, the effects determination for this project is "no effect" for listed fish, plant or wildlife species. There is no critical habitat (designated or proposed) for wildlife or fish in the borrow pit. Wetlands and floodplains will not be affected by the rock removal and sort. Work in the borrow pit is in accordance with 1997 programmatic agreement regarding cultural resources management on National Forests in the state of Washington and will have no effect on American Indian or Alaska native religious or cultural sites, nor will it affect archaeological sites, or historic properties or areas."

Public involvement has included coordination with Okanogan County (lead contact for applicable aquatic resource permits through JARPA and participant over the past 2 years in quarterly coordination meetings), WDFW (participant over past 2 years in quarterly coordination meetings), USFS (ongoing consultations with NOAA Fisheries and USFWS and submission of various watershed-wide BAs; participant over past 2 years of quarterly coordination meetings); USCOE (participant in quarterly coordination meetings); NOAA Fisheries (ongoing TES species consultations on project BA for Phase 2; participant in quarterly coordination meetings), USFWS (ongoing TES species consultations on project BA; participant in quarterly coordination meetings), WDOE (participant in quarterly coordination meetings); USBOR (engineering design and peer review for the proposed project plan; participant in quarterly coordination meetings); as well as involving Colville Confederated Tribes (CCT), Yakama Nation (YN), Chewuch Basin Council (CBC), landowners, Winthrop and Twisp town councils. The public involvement program has evolved over several years and has included public notices, public meetings, agency coordination meetings, radio advertisements and discussions, stories in local newspapers, and information available via various internet web links. This project has widespread support for salmon recovery efforts.

**Findings:** The project is generally consistent with the Northwest Power Planning Council's Fish and Wildlife Program, as well as BPA's Watershed Management Program EIS (DOE/EIS-0265) and ROD. This Supplement Analysis finds that: 1) implementing the proposed action will not result in any substantial changes to the Watershed Management Program that are relevant to environmental concerns; and 2) there are no significant new circumstances or information relevant to environmental concerns and bearing on the Watershed Management Program or its impacts. Therefore, no further NEPA documentation is required.

/s/ Patricia R. Smith

Patricia R. Smith

Environmental Protection Specialist - KEC-4

CONCUR:

/s/ Katherine S. Pierce

Katherine S. Pierce

NEPA Compliance Officer – KEC-4

DATE: March 23, 2006

Attachments:

Checklist

WA SHPO Concurrence Letter

USDA FS CE - East Chewuch Borrow Pit, dated 8/5/05

USDA FS Contract for the Sale of Mineral Materials, Methow Valley, dated 8/10/05

cc: (w/ attachments)

Mr. Greg Knott, USBOR

Mr. Chris Johnson, Chewuch Basin Council, P.O. Box 1608, Okanogan, Washington 98840

Mr. Don Phillips, USFS